

What Is Claimed Is:

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1. A remote procedure calling expression generation system for generating a remote procedure calling expression for requesting a service composed by combining plural procedures in a resource space in which a resource object and a procedure for processing the resource object are distributed, the system comprising:

plural hyperobject means, each of which comprising:

procedure calling expression generation rule storage means for storing a procedure calling expression generation rule for generating a procedure calling expression;

one or more attribute storage means for storing an attribute value; and

link storage means for storing one or more pieces of link information of the other hyperobject means, wherein

the procedure calling expression generation rule stored in the procedure calling expression generation rule storage means is composed of a character string according to a predetermined syntax rule for describing one or more generation rule elements composed of a reference to the attribute value and/or a reference to a result of the generation of the procedure calling expression in linked hyperobject means.

2. A remote procedure calling expression generation system according to Claim 1, wherein the hyperobject means is activated in response to a request for generating the procedure calling expression, the system further comprising:

generation rule element extracting means for interpreting the procedure calling expression generation rule stored in the procedure calling expression generation rule storage means according to the predetermined syntax rule and extracting the generation rule element;

means for searching the attribute storage means if the extracted generation rule

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element is the reference to the attribute value and substituting a corresponding attribute value for the generation rule element; and

means for issuing the request for generating the procedure calling expression to the linked hyperobject means if the extracted generation rule element is the reference to the result of the generation of a procedure calling expression in the linked hyperobject means and substituting the result of the generation of the procedure calling expression by the linked hyperobject means for the generation rule element.

3. A remote procedure calling expression generation system according to Claim 1, wherein the hyperobject means is a program for generating a hypertext.

4. A remote procedure calling expression generation system for generating a URL for requesting a service composed by combining plural procedure servers in a WWW resource space in which an HTTP object and a procedure for processing the HTTP object are distributed, the system comprising:

plural hyperobject means, each of which comprising:

URL generation rule storage means for storing a URL generation rule for generating a URL as a procedure calling expression;

one or more attribute storage means for storing an attribute value; and

link storage means for storing one or more pieces of link information of the other hyperobject means, wherein

the URL generation rule stored in the URL generation rule storage means is composed of a character string according to a predetermined syntax rule for describing one or more URL generation rule elements composed of a reference to the attribute value and/or a reference to a result of the generation of the URL in linked hyperobject means.

5. A remote procedure calling expression generation system according to Claim 4, wherein the hyperobject means is activated in response to a request for



the generation of the procedure calling expression in a linked hyperobject.

7. A hyperobject according to Claim 6, wherein the hyperobject is activated in response to a request for generating the procedure calling expression, the hyperobject further comprising:

means for interpreting the procedure calling expression generation rule stored in the procedure calling expression generation rule storage means according to the predetermined syntax rule and extracting the generation rule element;

means for searching the attribute storage means if the extracted generation rule element is the reference to the attribute value and substituting a corresponding attribute value for the generation rule element; and

means for issuing the request for generating the procedure calling expression to the linked hyperobject if the extracted generation rule element is the reference to the result of the generation of the procedure calling expression in the linked hyperobject and substituting the result of the generation of the procedure calling expression by the linked hyperobject for the generation rule element.

8. A hyperobject according to Claim 6, wherein the hyperobject is an object-oriented program for generating a hypertext.

9. A hyperobject for generating a URL for requesting a service composed by combining plural procedure servers in a WWW resource space in which an HTTP object and a procedure for processing the HTTP object are distributed, the hyperobject comprising:

URL generation rule storage means for storing a URL generation rule for generating a URL as a procedure calling expression;

one or more attribute storage means for storing an attribute value; and

link storage means for storing one or more pieces of link information of the other hyperobjects, wherein

the URL generation rule stored in the URL generation rule storage means is composed of a character string according to a predetermined syntax rule for describing one or more URL generation rule elements composed of a reference to the attribute value and/or a reference to a result of the generation of the URL in a linked hyperobject.

10. A hyperobject according to Claim 9, wherein the hyperobject is activated in response to a request for generating the URL, the hyperobject further comprising:

means for interpreting the URL generation rule stored in the URL generation rule storage means according to the predetermined syntax rule and extracting the URL generation rule element;

means for searching the attribute storage means if the extracted URL generation rule element is the reference to the attribute value and substituting a corresponding attribute value for the URL generation rule element; and

means for issuing the request for generating the URL to the linked hyperobject if the extracted URL generation rule element is the reference to the result of the generation of the URL in the linked hyperobject and substituting the result of the generation of the URL by the linked hyperobject for the URL generation rule element.